REMARKS

Applicants thank Examiner Divecha for his careful attention to this patent application. Applicants have amended the claims to overcome the §112 rejections,

I.   Claims 19-27.

The Examiner rejected claims 19-27 as anticipated by Pascucci et al., U.S. Patent No. 5,550,980 (hereinafter Pascucci).

A.   Claim 19

In Pascucci, the application controllers are not directly connected to the network. Rather, they are connected by way of NCUs (network control units). Messages from the central controller are sent to the NCU. The NCU then determines what actions to take with respect to the application controllers connected to the NCU. (See Figs. 10 & 20)

Claim 19, as amended, states that the application controllers are connected directly to the communications network and that the control interface transmit explicit messages by way of an explicit address to the application controllers. Thus, the control interface communicates directly with the control interface without the need for an NCU.

This provides a cost effective small building control system that is relatively simple to install, configure and operate. The present invention preferably includes a dedicated local control interface that replaces the high-cost PC conventionally used to configure and/or operate a conventional IBS. The dedicated controller includes only those components necessary to configure and control the system, and is therefore less expensive than conventional PCs.

B.   Claims 20-23

Claims 20-23 are allowable for the same reasons as claim 19.

C.   Claim 24.

Claim 24 as amended requires that the control interface have a means for periodically transmitting a ping by explicit addressing. As stated previously, Pascucci does not use explicit addressing for accessing application controllers.

D.   Claim 25

As amended, claim 25 states the application controller responds directly to the control interface. This also is not shown in Pascucci since all communication between an application controller and the central unit goes through an NCU.

E.   Claims 26, 27 & 28

Claims 26 and 27 are allowable for the same reasons as the previous claims.

II.   Claims 1-6, 9-18, and 29

The Examiner rejected claims 1-6, 9-18, and 29 as obvious due to Pascucci et al., U.S. Patent No. 5,550,980 (hereinafter Pascucci) in view of Pouchak et al., Pub. No. 2003/0005086, U.S. Patent 6,813,61 (hereinafter Pouchak).

The claim requires, among other things, self-configuration means further including means for configuring said first application controller based on said profile corresponding to said controller.

A.   Claim 1

1.   There is no suggestion to combine Pouchak and Pascucci.

The system shown in Pascucci provides a communication network where the communication between a central controller contacts an application controller by way of an NCU. Pouchak, on the other hand, shows a method where individual application controllers can be configured so as to communicate with each other. In Pouchak, a supervisory node broadcasts a new ID numbers to various client nodes on the network. Each client then use the broadcasted ID number as its network ID number.

One skilled in the art would not combine these two references. The problem faced in Pouchak is how to set up a communication link between the application controller and the control interface. Pascucci does not even address the issue. Pascucci assumes that communication links between the various controls is already in existence. Thus, one skilled in the art would not combine the two references.

2. **If Pouchak and Pascucci were combined, the result would not be the claimed invention.**

The Examiner says that the combination of Pouchak and Pascucci would result in the invention of Claim 1. Not so.

Pouchak allows the configuration of a communication link between various devices on the network. If Pascucci were combined, the result would be a system like that shown in Pascucci that could establish a communication link automatically. However, the system would still not provide automatic **configuration**, and thus the device of claim 1 would not be the result of the combination of Pouchak and Pascucci.

Claim 1 requires that the self-configuration means include means for configuring the controller based upon a profile corresponding to the profile type. This is not done.

Further, the Examiner is not combining the references as they are. Rather, the Examiner is picking and choosing portions the Pouchak reference to use with Pascucci rather than taking the whole Pouchak reference with Pascucci.

3. Pouchak is incompatible with Pascucci

In Pouchak, configuration information is sent from the application controller to the supervisory node. Paragraphs 108 to 119. On the other hand, Pascucci's configuration information is within a database. (col. 67, lines 9-10).

If the two systems were combined, configuration information in the database would conflict with configuration information contained in the application controllers. Thus, a combination of the two systems would result in a chaotic system where configuration information would be in conflict.

B. Claim 2

Claim 2 is allowable because claim 1 is allowable.

C. Claim 3

Claim 3 again highlights how the combination of Pouchak and Pascucci in the manner suggested by the Examiner is impossible. In Pouchak, there is no database. In Pascucci, there is a database. If Pouchak was combined with Pascucci, there would be no need for a database since all information is supplied by the application controllers.

Thus, claim 3 is allowable.

D.   Claim 4

Claim 4 requires that the control interface, which is defined in claim 1 as including a database, transmits explicit messages to the application controller. Pouchak does not have a control interface as defined by the claims. Thus, the Examiner is picking and choosing which items from Pouchak will be selectively used in Pascucci.

E.   Claim 5

Claim 5 is allowable because the claim upon which it depends is allowable.

F.   Claim 6

Claim 6 specifies that the database include input, output and configuration data structures for application controllers.

However, if Pouchak were combined with Pascucci, there would be no database since the information would always come from the application controllers themselves. Thus, the combination of Pouchak with Pascucci would not result in the invention of claim 6.

G.   Claim 9-11

Claims 9-12 are allowable because the claims upon which they depends are allowable.

H.   Claim 12

Claim 12 requires a database of application software control images and means for downloading software images into an application controller.

Pascucci show downloading of databases into NCUs. NCUs are network control units. Col. 28, line 30. NCUs are not application controllers. (See Fig. 10 where an NCU is connected to a lighting controller.)

Thus, claim 12 is not shown by the references cited by the Examiner, and is therefore allowable.

I.   Claim 13

Claim 13 is allowable for the same reason as claim 12.

J.   Claim 14

As noted above, Pascucci does not show downloading anything to application controllers. Therefore, the statement of the Examiner that the application controllers are capable of receiving and installing software images is conjecture.

K.   Claims 15, 16 & 17

Claim 15 and 16 are allowable for the same reason as claims 12, 13, and 14.

L.   Claim 18.

The portion of the specification used by the Examiner in rejecting claim 18 is with reference to a network controller. See Col. 33, lines 1-54. Thus, the network controller shown in Pascucci, not the application controllers, is executing code.

Thus, Claim 18 is not shown by Pascucci in combination with Pouchak.

II.   Claims 7, 8, 30 and 31

The Examiner rejected claims 7, 8, 30 and 31 as obvious due to Pascucci, Pouchak, and U.S. Patent No. 6,349,883 (hereinafter "Simmons").

A.   Claim 7

First, claim 7 states that each application controller has an occupancy status. This is not shown in Pascucci. In fact, "occupancy" is not even mentioned in the Pascucci patent.

Second, the Examiner states that Pascucci shows a means for grouping a plurality of application controllers into an occupancy group, referring to col. 40, Lines 30-65. However, the patent states, "Each group is assigned to one node in the network and may have many elements within the group." The patent indicates that each node is a network control unit. Col. 37, lines 61-65. Thus, the application controllers on the network are grouped by node, not by occupancy status.

The Examiner does admit that Pascucci does not show a means for defining occupancy status of each of said controller in a given group as a group. Simmons, however, does not show such a grouping. It merely shows that occupancy status of a zone is one variable to consider in operating an HVAC system.

If Simmons were combined with Pascucci, the result would be separate monitoring of the occupancy by zone rather than by application controller. Thus, the claimed invention would not result for the combination of references.

B.   Claim 8

Claim 8 is allowable because it depends from Claim 7.

C.   Claim 30

Claim 30 is allowable for the same reasons as stated with reference to Claim 7.

D.   Claim 31

The Examiner rejected claim 31 by contending that "motion detectors" are a means for calculating person count. However, the motion detector shown in Simmons produces an output if one person, a hundred people or a thousand people are moving. It simply provides either a "yes, room is occupied" or "no, room is not occupied." It never does a count of the occupants of the room.

Further claim 31 states that a person count is based on access entry and access exit information. This is not shown in Simmons.

[The remainder of this page is intentionally blank.]

CONCLUSION

In view of the above amendments and these remarks, Applicants respectfully submit that the present application is in condition for allowance. A notice to that effect is earnestly and respectfully requested.

Respectfully submitted,

CHRISTOPHER KIKTA

By: Warner Norcross & Judd LLP

/J. Ray Wood/

J. Ray Wood
Registration No. 36,062
900 Fifth Third Center
111 Lyon Street, N. W.
Grand Rapids, MI 49503-2487

1221383